

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-11. (Cancelled)

12. (Currently Amended) An external bone fixation device comprising:
an orthopedic articulating module mountable on bone, the articulating module comprising:

a central member having first and second ends along a longitudinal axis,
the first end defining a first flange having a first plurality of teeth and the second end
defining a second flange having a second plurality of teeth, wherein the first and second
flanges are substantially perpendicular;

a first pivot segment coupled to the central member for driven rotation about a first pivot axis; and

a second pivot segment coupled to the central member for driven rotation about a second pivot axis, the second pivot axis being substantially perpendicular to the first pivot axis.

13. (Currently Amended) The external bone fixation device of Claim 12, wherein ~~the central member includes first and second driven portions, the first pivot segment includes a first drive member engaged with the first driven portion flange and the second pivot segment include a second drive member engaged with the second driven portion flange.~~

14. (Currently Amended) The external bone fixation device of Claim 13, wherein ~~the first and second driven portions both define a plurality of teeth flanges are arcuate.~~

15. (Previously Presented) The external bone fixation device of Claim 14, wherein the first and second drive members include first and second worm gears meshingly engaging the first and second pluralities of teeth, respectively.

16. (Currently Amended) The external bone fixation device of Claim 14 12, wherein the central member is unitarily formed.

17. (Currently Amended) The external bone fixation device of Claim 16, wherein the first and second pluralities of teeth are arcuate and the first plurality of teeth is oriented substantially perpendicularly to the second plurality of teeth.

18. (Currently Amended) An external bone fixation device comprising:
first and second orthopedic mounting members mountable on bone; and
[[:]])

an articulating module coupled to the mounting members, the articulating module comprising:

a central member having first and second ends along a longitudinal axis,
the first end defining a first flange having a first plurality of teeth and the second end
defining a second flange having a second plurality of teeth, wherein the first and second
flanges are substantially perpendicular; and

first and second translation segments coupled to the central member, the first and second translation segments coupled to the first and second mounting members for controlled translation along first and second translation axes, the second translation axis being substantially perpendicular to the first translation axis.

19. (Previously Presented) The device of claim 18, further comprising first and second pivot segments respectively extending from the first and second translation segments, the first and second pivot segments pivotably coupled to the central member for controlled rotation about respective first and second pivot axes, wherein the first pivot axis is substantially perpendicular to the second pivot axis.

20. (Previously Presented) The device of claim 18, wherein each of the first and second translation segments includes a threaded worm meshingly engaged with the corresponding mounting member for relative translation along the corresponding translation axis.

21. (Previously Presented) The device of claim 19, wherein each of the first and second pivot segments includes a threaded worm meshingly engaged with the central member for relative rotation about the corresponding pivot axis.

22. (Currently Amended) An articulating module for an external bone fixation device, the articulating module comprising:

a central member having first and second ends along a longitudinal axis, the first end defining a first flange having a first plurality of teeth and the second end defining a second flange having a second plurality of teeth, wherein the first and second flanges are substantially perpendicular;

first and second pivot segments coupled to the central member for rotation about two perpendicular pivot axes;

first and second mounting members mountable on bone; and

first and second translation segments extending from the first and second pivot segments and coupled with the first and second mounting members for translation along two perpendicular axes.

23. (Previously Presented) The module of claim 22, wherein each pivot segment includes a threaded worm meshingly engaged with the central member for selectively controlling rotation about the corresponding pivot axis.

24. (Previously Presented) The module of claim 22, wherein each translation segment includes a threaded worm meshingly engaged with the corresponding mounting member for selectively controlling translation along the corresponding translation axis.

25. (Previously Presented) The module of claim 22, wherein each translation segment is slidably engaged with the corresponding mounting member.

26. (Withdrawn) A method of correcting a deformity or fracture or malunion of a bone having a longitudinal axis, the method comprising:

attaching first and second mounting members to the bone;

connecting an articulating module to the first and second mounting members, the articulating module including first and second translation segments slidably coupled with the mounting members, and first and second pivot segments extending from the corresponding translation segments and pivotably coupled to a central member of the module; and

rotating the first pivot segment relative to the central member about a first pivot axis.

27. (Withdrawn) The method of claim 26, further comprising translating the first translation member along a first translation axis relative to the first mounting member.

28. (Withdrawn) The method of claim 26, further comprising rotating the second pivot segment relative to the central member about a second pivot axis, wherein the second pivot axis is perpendicular to the first pivot axis.

29. (Withdrawn) The method of claim 28, further comprising translating the second translation segment along a second translation axis relative to the second mounting member, wherein the second translation axis is perpendicular to the first translation axis.

30. (Withdrawn) The method of claim 26, wherein rotating the first pivot segment includes controlling rotation with a threaded worm meshingly engaged with the central member.

31. (Withdrawn) The method of claim 27, wherein translating the first translation segment includes controlling translation with a threaded worm meshingly engaged with the first mounting member.

32. (Withdrawn) The method of claim 28, wherein rotating the second pivot segment includes controlling rotation with a threaded worm meshingly engaged with the central member.

33. (Withdrawn) The method of claim 29, wherein translating the second translation segment includes controlling translation with a threaded worm meshingly engaged with the second mounting member.

34. (Withdrawn) A gear mechanism for an external bone fixation device having first and second mounting members mountable on bone, the gear mechanism integrally formed to include a first plurality of teeth relative to which the first mounting member is driven about a first pivot axis, and a second plurality of teeth relative to which the second mounting member is driven about a second pivot axis, wherein the first pivot axis is perpendicular to the second pivot axis.

35. (Withdrawn) The gear mechanism of claim 34 in combination with the external bone fixation device.

36. (Withdrawn) The gear mechanism of claim 35, wherein the first worm gear is substantially perpendicular to the second worm gear.

37. (Withdrawn) The gear mechanism of claim 34, further comprising means for selectively preventing rotation about the first and second pivot axes.